Erwin Berthier

List of Publications by Year
in descending order

56 papers	2,922 citations	201385 27 h-index	182168 51 g-index
83 all docs	83 docs citations	83 times ranked	3867 citing authors

#	Article	IF	Citations
1	Engineers are from PDMS-land, Biologists are from Polystyrenia. Lab on A Chip, 2012, 12, 1224.	3.1	769
2	Flow rate analysis of a surface tension driven passive micropump. Lab on A Chip, 2007, 7, 1475.	3.1	167
3	Suspended microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10111-10116.	3.3	156
4	Rapid Prototyping of Arrayed Microfluidic Systems in Polystyrene for Cell-Based Assays. Analytical Chemistry, 2011, 83, 1408-1417.	3.2	148
5	Managing evaporation for more robust microscale assays : Part 1. Volume loss in high throughput assays. Lab on A Chip, 2008, 8, 852.	3.1	105
6	Open Microfluidic Capillary Systems. Analytical Chemistry, 2019, 91, 8739-8750.	3.2	87
7	Microbial metabolomics in open microscale platforms. Nature Communications, 2016, 7, 10610.	5.8	86
8	Microfluidic kit-on-a-lid: a versatile platform for neutrophil chemotaxis assays. Blood, 2012, 120, e45-e53.	0.6	83
9	Microbial volatile communication in human organotypic lung models. Nature Communications, 2017, 8, 1770.	5.8	78
10	Low-Volume Toolbox for the Discovery of Immunosuppressive Fungal Secondary Metabolites. PLoS Pathogens, 2013, 9, e1003289.	2.1	73
11	Fundamentals of rapid injection molding for microfluidic cell-based assays. Lab on A Chip, 2018, 18, 496-504.	3.1	70
12	Reconfigurable open microfluidics for studying the spatiotemporal dynamics of paracrine signalling. Nature Biomedical Engineering, 2019, 3, 830-841.	11.6	68
13	Characterizing asthma from a drop of blood using neutrophil chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5813-5818.	3.3	64
14	An arrayed high-content chemotaxis assay for patient diagnosis. Integrative Biology (United Kingdom), 2010, 2, 630-638.	0.6	58
15	A general condition for spontaneous capillary flow in uniform cross-section microchannels. Microfluidics and Nanofluidics, 2014, 16, 779-785.	1.0	49
16	Hax1 regulates neutrophil adhesion and motility through RhoA. Journal of Cell Biology, 2011, 193, 465-473.	2.3	46
17	Managing evaporation for more robust microscale assays : Part 2. Characterization of convection and diffusion for cell biology. Lab on A Chip, 2008, 8, 860.	3.1	43
18	Assessment of Enhanced Autofluorescence and Impact on Cell Microscopy for Microfabricated Thermoplastic Devices. Analytical Chemistry, 2013, 85, 44-49.	3.2	41

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19	Upgrading well plates using open microfluidic patterning. Lab on A Chip, 2017, 17, 4253-4264.	3.1	41
20	The Actin Regulatory Protein HS1 Interacts with Arp2/3 and Mediates Efficient Neutrophil Chemotaxis. Journal of Biological Chemistry, 2012, 287, 25466-25477.	1.6	38
21	RsmA Regulates Aspergillus fumigatus Gliotoxin Cluster Metabolites Including Cyclo(L-Phe-L-Ser), a Potential New Diagnostic Marker for Invasive Aspergillosis. PLoS ONE, 2013, 8, e62591.	1.1	38
22	Fungal oxylipins direct programmed developmental switches in filamentous fungi. Nature Communications, 2020, 11, 5158.	5.8	37
23	Layer-by-layer fabrication of 3D hydrogel structures using open microfluidics. Lab on A Chip, 2020, 20, 525-536.	3.1	34
24	Bead-based microfluidic toxin sensor integrating evaporative signal amplification. Lab on A Chip, 2008, 8, 1793.	3.1	33
25	Integrin associated proteins differentially regulate neutrophil polarity and directed migration in 2D and 3D. Biomedical Microdevices, 2015, 17, 100.	1.4	33
26	Investigating Fibroblast-Induced Collagen Gel Contraction Using a Dynamic Microscale Platform. Frontiers in Bioengineering and Biotechnology, 2019, 7, 196.	2.0	33
27	Pipette-friendly laminar flow patterning for cell-based assays. Lab on A Chip, 2011, 11, 2060.	3.1	29
28	Droplet incubation and splitting in open microfluidic channels. Analytical Methods, 2019, 11, 4528-4536.	1.3	27
29	Backward flow in a surface tension driven micropump. Journal of Micromechanics and Microengineering, 2008, 18, 087002.	1.5	26
30	An automated microdroplet passive pumping platform for high-speed and packeted microfluidic flow applications. Lab on A Chip, 2010, 10, 23-26.	3.1	25
31	Kit-On-A-Lid-Assays for accessible self-contained cell assays. Lab on A Chip, 2013, 13, 424-431.	3.1	23
32	An inertia enhanced passive pumping mechanism for fluid flow in microfluidic devices. Lab on A Chip, 2012, 12, 2221.	3.1	21
33	Induced hydrophobic recovery of oxygen plasma-treated surfaces. Lab on A Chip, 2012, 12, 2317.	3.1	20
34	A Golgi-Localized Pool of the Mitotic Checkpoint Component Mad1 Controls Integrin Secretion and Cell Migration. Current Biology, 2014, 24, 2687-2692.	1.8	20
35	Clinical application of volumetric absorptive microsamplingÂto the gefapixant development program. Bioanalysis, 2020, 12, 893-904.	0.6	20
36	Metastable capillary filaments in rectangular cross-section open microchannels. AIMS Biophysics, 2014, 1, 31-48.	0.3	20

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37	Droplet Behavior in Open Biphasic Microfluidics. Langmuir, 2018, 34, 5358-5366.	1.6	18
38	Human iNKT Cells Promote Protective Inflammation by Inducing Oscillating Purinergic Signaling in Monocyte-Derived DCs. Cell Reports, 2016, 16, 3273-3285.	2.9	17
39	Capillary Flow in Open Microgrooves: Bifurcations and Networks. Langmuir, 2019, 35, 10667-10675.	1.6	17
40	Open-Channel Capillary Trees and Capillary Pumping. Langmuir, 2020, 36, 12795-12803.	1.6	15
41	High-Density Self-Contained Microfluidic KOALA Kits for Use by Everyone. Journal of the Association for Laboratory Automation, 2015, 20, 146-153.	2.8	11
42	homeRNA: A Self-Sampling Kit for the Collection of Peripheral Blood and Stabilization of RNA. Analytical Chemistry, 2021, 93, 13196-13203.	3.2	11
43	User-defined morphogen patterning for directing human cell fate stratification. Scientific Reports, 2019, 9, 6433.	1.6	10
44	Open microfluidic coculture reveals paracrine signaling from human kidney epithelial cells promotes kidney specificity of endothelial cells. American Journal of Physiology - Renal Physiology, 2020, 319, F41-F51.	1.3	8
45	Fluorescence-Based Assessment of Plasma-Induced Hydrophilicity in Microfluidic Devices via Nile Red Adsorption and Depletion. Analytical Chemistry, 2014, 86, 7258-7263.	3.2	6
46	Multikingdom microscale models. PLoS Pathogens, 2017, 13, e1006424.	2.1	6
47	Stable biphasic interfaces for open microfluidic platforms. Biomedical Microdevices, 2019, 21, 16.	1.4	6
48	A Microfluidic Assay for Identifying Differential Responses of Plant and Human Fungal Pathogens to Tobacco Phylloplanins. Plant Health Progress, 2014, 15, 130-134.	0.8	4
49	Miniaturizing Wet Scrubbers for Aerosolized Droplet Capture. Analytical Chemistry, 2021, 93, 11433-11441.	3.2	3
50	High Speed Droplet-based Delivery System for Passive Pumping in Microfluidic Devices. Journal of Visualized Experiments, 2009, , .	0.2	1
51	Spatial presentation of biological molecules to cells by localized diffusive transfer. Lab on A Chip, 2019, 19, 2114-2126.	3.1	1
52	Localized Cell-Surface Sampling of a Secreted Factor Using Cell-Targeting Beads. Analytical Chemistry, 2020, 92, 13634-13640.	3.2	1
53	Spontaneous Capillary Flow Between Horizontal Rails. , 2016, , 207-228.		0
54	Hax1 regulates neutrophil adhesion and motility through RhoA. Journal of Experimental Medicine, 2011, 208, i14-i14.	4.2	0

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55	Microbe-Independent Entry of Oomycete RxLR Effectors and Fungal RxLR-Like Effectors Into Plant and Animal Cells Is Specific and Reproducible. Molecular Plant-Microbe Interactions, 2015, 2015, 51-56.	1.4	0
56	Localized Cell-Surface Sampling of a Secreted Factor Using Cell-Targeting Beads. Analytical Chemistry, 2020, 92, 13634-13640.	3.2	0